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The Commonwealth of Massachusetts
Executive Office of Public Safety and Security
Department of Fire Services

P.O. Box 1025 ~ State Road

Stow, Massachusetts 01775

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STEPHEN D. COAN
STATE FIRE MARSHAL

THOMAS P. LEONARD
DEPUTY STATE FIRE MARSHAL

MEMORANDUM

To: Heads of Fire Departments

From: Stephen D. Coan
State Fire Marshal

Date: November 30, 2009

RE: Commercial Cooking Operations (527 CMR 11)

The regulation governing commercial cooking operations, which was adopted earlier this year, creates several new items. The first, effective January 1, 2010, requires a certificate of competency for those conducting cleaning/inspection of commercial cooking operations (527 CMR 11). The second is a requirement to notice the local fire departments of deficiencies discovered during the cleaning/inspection. As a result, of this requirement, we are already seeing reports and some common deficiencies.

As a result, the Department of Fire Services has generated a “generic” order (attached) that can be used and modified to meet your department’s needs. This sample order is not all-inclusive, but can assist the local departments. Please refer to the 2008 edition of NFPA 96 and 527 CMR 11 for all the code requirements of commercial cooking operations.

If you have any please contact the Code Compliance and Enforcement Unit at 978-567-3375 or in Western MA at 413-587-3181.

SDC/bhs

ORDER OF NOTICE

Business: _____ Date: _____

Address: _____ Tel: _____

City: _____ Zip code: _____

On _____, the _____ Fire Department conducted an inspection of your commercial cooking exhaust system. The inspection revealed the following violations:

- ☐ Failure to inspect the exhaust system in accordance with 527 CMR 11.02, NFPA 96 11.4
- ☐ Failure to have fire-extinguishing system inspected semi-annually. (527 CMR 11.02), (NFPA 96 11.2.1)
- ☐ Excessive grease build-up. (527 CMR 11.02), (NFPA 96 11.6.2)
- ☐ Inability to access all areas of the exhaust system. (527 CMR 11.02), (NFPA 96 7.3.1)
- ☐ Grease filters not in compliance with the standard. (527 CMR 11.02), (NFPA 6.1)
 - ☐ Mesh filters shall not be used
 - ☐ Filter(s) not listed
 - ☐ Filter(s) not present
- ☐ Hood and duct not liquid tight. (527 CMR 11.02), (NFPA 7.5.2.1)
- ☐ Other: _____

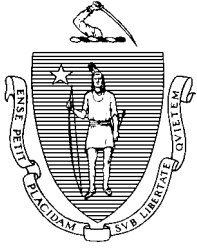
- ☐ Violations shall be corrected by no later than _____.
- ☐ You are ORDERED to immediately cease and desist all cooking operations until the above listed violations have been corrected.

Failure to comply with this order may result in civil and/or criminal penalties.

Contact the _____ Fire Department at (000) 000-0000 when the violations have been corrected.

Owner/occupant signature: _____ Date: _____

Fire department signature: _____ Date: _____



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MEMORANDUM

To: Heads of Fire Departments

From: Stephen D. Coan
State Fire Marshal

Date: November 19, 2009

RE: Special provisions for certain places of worship used as Temporary Overnight Shelter from the cold.

Introduction:

As the cold winter season is approaching, I bring to your attention two new regulations that have been approved, on an emergency basis, by both the Board of Building Regulations and Standards and the Board of Fire Prevention Regulations. These regulations allow certain approved places of worship to be used on a limited basis as temporary overnight shelters from the cold. The intent of the amendments is to provide provisions to balance the obvious harm created by exposure to extreme cold, with the basic public safety concerns reflected in the fire, building, and health codes.

A summary of the regulations is provided within this document. However, it is important for you to review the actual regulations in detail prior to implementation in your respective communities.

Board of Building Regulations and Standards (780 CMR State Building Code):

The Board of Building Regulations and Standards has adopted an emergency amendment to the State Building Code (780 CMR) section 3111 – Temporary Overnight Shelters for Protection from the Cold. This section completes a section in the State Building Code that allows for a church or house of worship to apply for a temporary change of use and sets the

conditions and requirements for such use. The various sections are summarized as follows:

Section 3111.2 of the State Building Code limits the application to a facility that is designed or used primarily as a church or house of worship for religious services or instruction, which is owned or operated by a religious organization under U.S.C. section 501 (c)(3) of the Internal Revue Code.

The State Building Code limits the temporary overnight shelters for protection from the cold to the following:

- Between September 15 and June 15; and
- For not more than 35 days; and
- For not more than 7 consecutive days.

These limits are separate from other emergency situations such as a state of emergency declared by the Governor or an emergency deemed detrimental to public health pursuant to MGL c. 17 s. 2A. The State Building Code sets the criteria for submitting an application for approval of the Temporary Certificate and its issuance. During this process it is imperative that the local Building Inspector, Fire Chief and local Board of Health agent work together during the permit review process.

Temporary Certificates are to be issued for a period not to exceed one year. Applications for renewal are to be reviewed in accordance with the requirements set forth in a new application. It requires notice, prior to the use, at least 48 hours in advance with specific information and similar notification at the time of termination.

As a condition to its approval, the local Building Inspector, Head of the Fire Department, or local Board of Health may enter the premises to determine compliance with the regulation.

Board of Fire Prevention Regulations (527 CMR State Fire Code):

The Board of Fire Prevention Regulations have adopted emergency amendments to 527 CMR 10.13(8): Special provisions for certain places of worship which have been issued a valid certificate of occupancy for use as a temporary overnight shelter from the cold pursuant to 780 CMR, the State Building Code.

This provision of the State Fire Code is dependent upon the issuance of a valid Temporary Certificate under 780 CMR by the local Building Inspector. If the Certificate is not issued under 780 CMR, the provisions of 527 CMR are not applicable. The provisions of 527 CMR 10.13(8) are briefly described below, but again, the actual regulation shall be reviewed in detail for compliance:

- No outstanding violations of 527 CMR or MGL 148
- Possession of a written document, approved by the Head of the Fire Department showing: allowable occupant load, bedding diagram,

location of all exits and aisles leading to a designated evacuation meeting point.

- The attendants shall be trained and drilled in the duties that they are to perform in case of fire, panic, or other emergency. An attendant shall be awake at all times.
- No person shall be permitted to smoke within the shelter. A designated area outside may be approved by the Head of the Fire Department.
- A document shall be posted, in a location approved by the Head of the Fire Department, containing an accurate number of sheltered occupants on a nightly basis, which includes the names of all workers or volunteers. In the event of an evacuation, a copy shall be in the possession of the person in charge at a designated meeting point.
- The shelter shall maintain a working landline phone that must be accessible in the event of an emergency. A cell phone is not acceptable for compliance with this requirement.

If you have any please contact the Code Compliance and Enforcement Unit at 978-567-3375 or in Western MA at 413-587-3181.

SDC/bhs

Fire Code provisions relating to Approved Temporary Shelters
As approved by the BFPR on 11-5-09

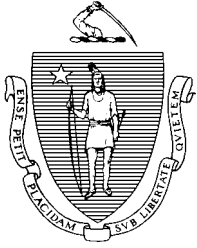
10.13 (8) Special provisions for certain places of worship which have been issued a valid Certificate of Occupancy for use as a temporary overnight shelter from the cold pursuant to 780 CMR, The State Building Code.

1) A place of worship which has been issued a valid Certificate of Occupancy for use as a temporary overnight shelter from the cold in accordance with the provisions of 780 CMR, the state building Code, shall not be deemed in violation of the provision of 527 CMR, as a result of such temporary use, as long as the facility meets the following conditions:

- (a) The temporary shelter is in possession of a valid Certificate of Occupancy for such temporary use which has been reviewed and approved by the head of the fire department in accordance with 780 CMR.
- (b) The approved temporary shelter is used, occupied and operated in accordance with the terms and conditions specified in said Certificate of Occupancy and said certificate of occupancy is posted in a conspicuous location.
- (c) In addition to the terms and conditions specified in the Certificate of Occupancy, the following fire safety requirements shall be applicable:
 - 1. The building which houses the approved temporary shelter shall have no known existing or outstanding violations of 527 CMR or M.G.L. c. 148.
 - 2. The approved temporary shelter possess a written document which has been approved by the head of the fire department which states the allowable occupant load, bedding diagram, location of all exits and of aisles leading thereto and the designated evacuation meeting point or points. A copy of such plan shall be kept on the premises and posted near the main entrance. The responsible persons identified in the application of the temporary certificate of occupancy shall maintain the condition of the shelter in accordance with the approved layout.
 - 3. The employees, volunteers or attendants of the temporary shelter shall be trained and drilled in the duties that they are to perform in case of fire, panic or other emergency in accordance with the provisions of 527 CMR 10.13(3)(a). During all hours of overnight activation of an approved temporary shelter, employees, volunteers and attendants shall be awake and alert.
 - 4. No person shall be permitted to smoke within the temporary shelter. Smoking may be allowed outside in an area approved by the Head of the Fire Department.
 - 5. A document shall be posted, in a location approved by the Head of the Fire Department, containing an accurate number of sheltered occupants on a nightly basis. Such document shall also contain the names of all workers and volunteers who are overseeing or assisting in the shelter usage on a nightly basis. In the event of an evacuation, a copy of the document shall be in the possession of the person in charge at a designated meeting point.

Fire Code provisions relating to Approved Temporary Shelters
As approved by the BFPR on 11-5-09

6. The temporary shelter shall maintain a working landline phone that must be accessible to initiate a call for assistance in the event of an emergency. A cell phone is not acceptable for compliance with this requirement.
 7. Carbon monoxide alarms shall be installed in accordance with 527 CMR 31.04(1). For purpose of compliance with 527 CMR 31.04, the dwelling unit of an approved temporary shelter shall be considered that portion of the building used for sleeping purposes.
 8. An approved temporary shelter shall feature working and approved smoke detectors in accordance with the requirements of the State Building Code, 780 CMR, if applicable. If smoke detectors are not currently required under 780 CMR, the shelter shall, at a minimum, feature approved working smoke detectors in accordance with the provisions of 527 CMR 32.00. Such smoke detectors shall be installed in any room or area used for sleeping purposes and in any room or area directly adjacent to said sleeping area.
- (d) The head of the Fire Department shall be notified, in writing, at least 48 hours prior to the actual activation of an approved temporary shelter and shall be notified, in writing, upon the termination of such activation.
 - (e) As a condition to use and occupation of an approved temporary shelter pursuant to 527 CMR 10.13 (8), The operator of any such shelter shall allow the head of the fire department or any person to whom the head of the fire department may delegate, the authority to enter the shelter during any hour of operation to determine compliance with the provisions of 527 CMR or M.G.L. c. 148.
 - (f) The provisions of 527 CMR 10.13(8) shall not impede the ability of the head of the fire department to take any reasonable action to protect persons or property under the authority of any provision of M.G.L. c. 148 or 527 CMR.
 - (g) The use of a temporary overnight shelter from the cold under the provisions of 527 CMR 10.13(8) shall not be allowed after June 15, 2010.



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MEMORANDUM

To: Heads of Fire Departments

From: Stephen D. Coan
State Fire Marshal

Date: November 30, 2009

RE: Updates to 527 CMR

Please find attached hereto copies of three (3) new regulatory changes from the Board of Fire Prevention Regulations.

The first regulation, which was filed on an emergency basis, delays the implementation of 527 CMR 10.13, which required the designation of a "crowd manager" by those who own/operate A-2 use group buildings (ex.: nightclubs, dancehalls and bars) to assure the safety of the occupants and complete a safety checklist as prescribed by the Marshal.

The second regulation, replaces 527 CMR 10.15 with new language that enhances public safety during floor refinishing activities. The regulation requires a permit (but no mandated inspection) from the head of the fire department for most refinishing activities. A notification/letter only is required for the smaller residential buildings (single family and other buildings up to 4 units). It also requires that certain precautions be taken to reduce or eliminate the risk of explosion or fire associated with such activity, including the posting of signs. The effective date of this regulation is 6-1-10.

The third regulation, 527 CMR 22.00: Cannons and Mortars, relates to the regulations for firing muzzle-loading cannons during events such as historical ceremonies and re-enactments. It contains many amendments, which improve readability and update safety standards and references to other applicable and related codes.

If you have any please contact the Code Compliance and Enforcement Unit at 978-567-3375 or in Western MA at 413-587-3181.

SDC/bhs

Administrative Services • Hazardous Materials Response
Massachusetts Firefighting Academy • Office of the State Fire Marshal

527 CMR: BOARD OF FIRE PREVENTION REGULATIONS

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10.01: Definitions

For the purpose of 527 CMR 10.00, the following terms shall have the meanings respectfully assigned to them:

ANSI. The American National Standards Institute

Approved. Approved by the State Fire Marshal.

Authority Having Jurisdiction. The head of the fire department.

Bulk Merchandising Retail Buildings. A building where sales areas contain:

- (a) Combustible materials in piles greater than 12 feet in height or combustible materials on pallets, in racks or on shelves where the top of storage is greater than 12 feet in height or
- (b) Combustible materials such as rubber tires, Group A plastics, flammable liquids, idle pallets and commodities with similar heat release characteristics where the top of storage is greater than six feet in height.

D.E.P. Massachusetts Department of Environmental Protection.

Fire Protection System. Shall include any devices, equipment and systems used to detect a fire, activate an alarm, suppress or control a fire or any combination thereof.

Fumigant. Includes any substance which by itself or in combination with any other substance emits or liberates a gas, fume or vapor used for the destruction or control of insects, fungi, vermin, germs, rats, or other pests, and shall be distinguished from insecticides and disinfectants which are essentially effective in the solid or liquid phases. Examples are methyl bromide, ethylene dibromide, hydrogen cyanide, carbon disulphide and sulfuryl fluoride.

Fumigation. The use within an enclosed space of a fumigant in concentrations which may be hazardous or acutely toxic to people.

10.01: continued

Hospital. A building used as a hospital or sanatorium, a convalescent or nursing home, or an infirmary, as such terms are defined in M.G.L. c. 111, § 71, and licensed as such occupancies.

High Hazard Occupancies. Those having contents which are liable to burn with extreme rapidity or from which poisonous fumes or explosions are to be feared in the event of fire.

Low Hazard Occupancies. Those having contents of such low combustibility that no self propagating fire therein can occur and that consequently the only probable danger will be from panic, fumes or smoke, or fire from some external source.

Open Air Parking Spaces. A place which may be occupied by an automobile or by a component which may be attached to or transported by an automobile, trailer or semi-trailer as defined in M.G.L. c. 90 and c. 148, § 56.

Nationally Recognized Testing Laboratory (NRTL). An organization which tests for safety and lists, labels or accepts equipment or materials and which meets the criteria in 527 CMR 49.00 (Appendix C).

Ordinary Hazard Occupancies. Those having contents which are liable to burn with moderate rapidity and to give off a considerable volume of smoke, but from which neither poisonous fumes nor explosions are to be feared in case of fire.

Place of Assembly. A room or space accommodating 50 or more individuals for religious, recreational, educational, political, social or amusement purposes, or for the consumption of food or drink, including all connected rooms or space with a common means of egress and entrance.

School. Any building or premises in which a regular course of public or private instruction is afforded to not less than ten pupils at one time, or to kindergartens, pre-primary or nursery schools where ten or more children are enrolled for instruction or care.

Smoking. Possessing a lighted cigarette, cigar, pipe, or other smoking article.

Thermal Insecticidal Fogging. The use of insecticidal liquids which are passed through thermal fog-generating units where they are, by means of heat, pressure and turbulence, transformed and discharged in the form of a fog or mist that is blown into an area to be treated.

10.02: Fire Extinguishers

(1) Any building or other premises, which, due to its location, construction, character or occupancy, or the manner of conducting business therein or thereupon is such that it is considered necessary by the head of the fire department, shall be provided with portable fire extinguishers installed and maintained in accordance with NFPA 10.

(2) Every school, college and university laboratory newly constructed or renovated, or any room used for similar purposes wherein corrosives or flammable liquids are handled or where open flame devices are used, shall be equipped with one or more Emergency Wash Systems. Emergency Wash Systems shall include Drench/Deluge Showers, Hand Held Body/Face Washers and Deck Mounted Drench Hoses. The permanently mounted showers shall be located as close to the main door of the laboratory as possible (to provide an escape route), but should not be located greater than 50' from an experimental area. The permanently mounted showers shall be capable of discharging a continuous spray at a rate of 30 gallons per minute. Emergency Wash Systems shall be tempered to between 70° and 90°F. Cold potable water shall be permitted in those locations where tempered water is not accessible or as permitted by the head of the fire department.

The Drench/Deluge Showers, Hand Held Body/Face Washers and Deck Mounted Drench Hoses shall be installed in accordance with ANSI Z-358.1 and 248 CMR.

Each existing laboratory not equipped with an Emergency Wash System shall be equipped with at least one approved Fire Blanket, and a sign that reads:

10.13: continued

Exception: Temporary deviation from the specifics of the approved seating diagram shall be permitted provided the occupant load is not increased and the intent of 527 CMR 10.17 is maintained.

(c) Exit Announcements. The owner or operator of any business or activity located within a Place of Assembly classified as an A-1 or A-2 use group under 780 CMR, the State Building Code, shall make an audible announcement prior to the start of each program or performance that notifies occupants of the location of the exits to be used in case of a fire or other emergency.

Such announcement may be made in person or by recorded communication and shall be communicated in such a reasonable manner to assure that all persons in attendance are aware of the location of the exits. Owners or operators of assemblies involving video or cinema presentations may use such video or cinematic medium to communicate such audible announcement or projected image. Such announcement or projected image shall include the location of egress routes or areas of rescue assistance for use by persons with disabilities.

In addition to the audible announcements required by 527 CMR 10.13, if any written program, playbill or similar document is distributed prior to each program or performance, such document shall include a diagram of the location of all egress routes or areas of rescue assistance for use by persons with disabilities.

new date

(d) Designation of a Crowd Manager. Effective July 1, 2010, the owner or operator of the business or activity located in any Place of Assembly classified as an A-2 use group under 780 CMR, the State Building Code, shall designate a crowd manager.

The crowd manager shall be at least 21 years of age, shall be the owner or operator of the business or shall be under the direct control and supervision of said owner or operator. The crowd manager shall be responsible for the following:

1. maintaining clear exits, assuring that there is no overcrowding, initiating a fire alarm if necessary, directing occupants to exits; and
2. General fire and life safety awareness of employees and occupants, including assuring that exit announcements are made in accordance with 527 CMR 10.13(2)(c); and
3. Accurately completing the safety plan checklist required by 527 CMR 10.13(2)(e).

The crowd manager shall be knowledgeable about the responsibilities required in 527 CMR 10.13(2)(d) and (e). The Marshal shall develop training materials and the method to assure that said crowd managers are knowledgeable about their responsibilities.

new date

(e) Fire and Building Safety Checklist. Effective July 1, 2010, the crowd manager required by the provisions of 527 CMR 10.13(2)(d) shall be responsible for the completion of the Fire & Building Safety Checklist, as prescribed by the Marshal. This checklist shall include, but not be limited to, the routine safety check of existing fire protection systems, fire extinguishers, signage, interior finish, exits, unobstructed egress, crowd control procedures, employee training and building capacity restrictions. This checklist shall be completed as required by the Marshal and shall be kept on the premises for at least one year. The checklist shall be subject to inspection by the head of the fire department, the Marshal or their designee.

(3) Special Residential Use Group.

(a) Evacuation Plan. The administration of every facility shall have in effect and available to all supervisory personnel written copies of a plan for the protection of all persons in the event of fire and for their evacuation to areas of refuge and from the building when necessary. The plan shall include special staff actions including fire protection procedures needed to ensure the safety of any resident and shall be amended or revised upon admission to the home of any resident with unusual needs. All employees shall be periodically instructed and kept informed in respect to their duties and responsibilities under the plan. Such instruction shall be reviewed by the staff at least every two months. A copy of the plan shall be readily available at all times within the facility.

(b) Resident Training. All residents capable of assisting in their evacuations shall be trained in the proper actions to take in the event of a fire. The training shall include actions to take if the primary escape route is blocked. If the resident is being given rehabilitation, training in fire prevention and actions to take in the event of a fire shall be a part of the rehabilitation training program. Residents shall be trained to assist each other in case of fire to the extent their physical and mental abilities permit them to do so without additional personal risk.

10.13: continued

(c) Fire Exit Drills. Fire exit drills shall be conducted at least six times per year, two times a year on each shift. Twelve drills shall be conducted in the first year of operation. The drills are not required to be unannounced.

(d) Evacuation. Fire exit drills shall involve the actual evacuation of all residents to a selected assembly point and shall provide residents with experience in exiting through all required exits. All credited exits shall be used during fire drills.

Exception: Actual exiting from windows shall not be required to meet the requirements 527 CMR 10.13; opening the window and signaling for help shall be an acceptable alternative.

(4) Use Group I-2 -- Incapacitated Care.

(a) Evacuation Plan. The administration of every building of Use Group I-2 shall have in effect and available to all supervisory personnel written copies of a plan for the protection of all persons in the event of fire and for their evacuation to areas of refuge and from the building when necessary. All employees shall be periodically instructed and kept informed with respect to their duties under the plan. A copy of the plan shall be readily available at all times in the telephone operators position or at the security center.

(b) Bed Mobility. Every bed intended for use by health care occupants shall be easily movable under conditions of evacuation and shall be equipped with the type and size of casters to allow easy mobility, especially over elements of the structure such as expansion plates and elevator thresholds.

Exception: Beds intended for use in areas limited to patients such as convalescent, self-care, or mental health patients.

(c) Fire Exit Drills. Fire exit drills in buildings of Use Group I-2 shall include the transmission of a fire alarm signal and simulation of emergency fire conditions except that the movement of infirm or bed-ridden patients to safe areas or to the exterior of the building shall not be required. Drills shall be conducted quarterly on each shift to familiarize facility personnel with signals and emergency action required under varied conditions. At least 12 drills shall be held every year. When drills are conducted between 9:00 p.m. (2100 hours) and 6:00 a.m. (0600 hours), a coded announcement shall be permitted instead of audible alarms.

(d) Records. A record of all fire exit drills shall be kept on the premises and persons in charge of such occupancies shall file written reports at least twice a year with the head of the fire department giving the information listed in 527 CMR 10.09(4)(a).

(e) Employee Training. Employees shall be instructed in life safety procedures and devices.

(5) Use Group I-3 -- Restrained.

(a) Emergency Plan. The administration of every facility shall have in effect and provided to all supervisory personnel written copies of a plan for the protection of all persons in the event of fire and for their evacuation to areas of refuge and from the building when necessary. All employees shall be instructed and drilled with respect to their duties under the plan. The plan shall be coordinated with and reviewed by the head of the fire department.

(b) Employee Training. Employees shall be instructed in the proper use of portable fire extinguishers and other manual fire suppression equipment. With respect to new staff, such training shall be provided promptly upon entrance on duty. With respect to existing staff, refresher training shall be provided at least annually.

(c) All building of Use Group I-3, or those portions of buildings having such occupancy, shall be provided with 24 hour staffing. Staff shall be within three floors or 300' horizontal distance of the access door of each resident housing area. In Use Condition III, IV and V as defined in 780 CMR, the arrangement shall be such that the staff involved can start release of locks necessary for emergency evacuation or rescue and initiate other necessary emergency actions within two minutes of alarm.

(d) Notification. Provisions shall be made so that residents in Use Conditions III, IV, and V as defined in 780 CMR can readily notify staff of an emergency.

(e) Keys. All keys necessary for unlocking doors installed in means of egress shall be individually identified by both touch and sight.

10.13: continued

- (6) High Rise Buildings.
- (a) General. The owner or other person having charge of buildings identified as high-rise buildings in 780 CMR shall be required to prepare and submit to the head of the fire department for review and approval a fire safety plan and evacuation procedure as set forth in 527 CMR 10.13(6).
- (b) Fire Safety Plan. The fire safety plan shall be distributed to the tenants and building service employees by the owner or agent. Tenants shall distribute to their employees applicable parts of the fire safety plan which affect their action in the event of a fire or emergency.
- (c) Responsibility to Update Fire Safe Plan. It shall be the responsibility of the owner or agent to promptly update the fire safety and evacuation procedures upon changes in occupancy, use or physical arrangement.
- (7) Marking or Identifying Certain Buildings that are Especially Unsafe in the Case of Fire.
- (a) Any building determined to be especially unsafe in case of fire, under the provisions of 780 CMR 121.2 shall be identified and caused to be marked by the building official, with the cooperation of the head of the fire department, to indicate the degree of hazard.
- (b) In marking such buildings, the following symbols shall be used:
- ☐ This symbol shall mean that interior hazard exists to such a degree that interior operations shall be conducted with extreme caution. This symbol shall not in any way limit the discretion of the on scene Incident Commander in directing operations that the Incident Commander deems necessary.
- ☒ This symbol shall mean that exterior or interior hazards exists to such a degree that consideration should be given to conduct operations from the exterior only. This symbol shall not in any way limit the discretion of the on scene Incident Commander in directing operations that the Incident Commander deems necessary.
- (c) Markings shall be applied on the front of the building at or above the second floor level, where practical, between openings such that they are visible from the street. Markings may be applied to the sides or the rear of a building if the head of the fire department deems such placement necessary. Markings shall also be applied in a conspicuous place near every entrance and on penthouses. Markings shall not be applied over doors, windows, or other openings where they may be obscured by smoke or fire.
- (d) Markings shall be a minimum of 24 inches by 24 inches. Markings shall either be on a placard with a reflective background or painted with a reflective paint of contrasting color directly on the surface of the building. Stripes and borders outside of the marking shall be a minimum of two inches wide.
- (e) All markings shall bear a date as to when applied or the date of the most recent inspection.
- (f) Prior to receiving a mark, all buildings shall be inspected thoroughly by the head of the fire department.

10.14: Hazard Abatement in Existing Buildings

- (1) General.
- (a) Scope. The provisions of 527 CMR 10.14 are to provide a reasonable degree of safety to persons occupying existing buildings that do not conform with the minimum requirements of 780 CMR by requiring the following alterations to such existing buildings.
- (b) Application of Other Codes. All alterations to an existing building which are caused directly or indirectly by the enforcement of 527 CMR 10.00 shall be done in accordance with the applicable procedures and provisions of 780 CMR, 248 CMR, the BOCA Mechanical Code and 527 CMR 12.00.
- (c) Continued Maintenance. All service equipment, means of egress devices and safeguards which are required by 527 CMR 10.00 or which were required by a previous statute or another regulation in a building or structure when erected, altered or repaired shall be maintained in good working order. The requirements of 527 CMR 10.14 are not to provide the basis for removal or abrogation of fire protection and safety systems and devices in existing buildings. These requirements are intended to require that existing buildings which do not comply with 527 CMR 10.00 be altered to provide a minimum level of safety as required herein.

10.14: continued

(2) Elevator Recall. Required. Elevator recall shall conform to the requirements of 524 CMR.

(3) Mechanical Equipment Control. Smoke and Heat Detection. Each recirculating air system which serves more than one floor in buildings which exceed six stories in height shall be equipped with approved smoke and heat detection devices in accordance with the BOCA Mechanical Code. The devices shall stop the fan(s) automatically and shall be of the manual reset type. Automatic fan shutdown is not required when the system is part of an approved smoke removal or control system, or hazardous exhaust system.

see Section:

10.15: Floor Finishing or Refinishing

(1) Specific Conditions.

(a) Scope. 527 CMR 10.15 shall apply to persons, or other entities that engage in sanding, finishing, or refinishing wood floors with or without compensation in any building or structure.

The equipment, processes and operation of floor finishing or refinishing operations shall comply with the applicable requirements of 527 CMR 10.00, 527 CMR 14.00 and 527 CMR 34.00.

(b) Permit Required. Effective June 1, 2010, any person or entity that performs wood floor finishing or refinishing operations involving the use and application of flammable liquids, as defined by 527 CMR 14.00, shall obtain a permit from the head of the fire department. Said permit shall indicate the name and address of the person performing the work and the address, date and time where such work is going to be performed.

Exception: For work in buildings classified as R-2 and containing less than four units or R-3, as defined in 780 CMR: *The Massachusetts State Building Code*, no permit shall be required provided that, a letter indicating the person who is going to perform the work, address, date and time where such work will be performed is forwarded to the head of the fire department at least 48 hours in advance of the proposed work, including changes to that date. The head of the fire department may waive or reduce the time of the written notice.

(2) Fire Safety Requirements. Effective June 1, 2010, every person applying any finishing or refinishing product to the floors in any building or structure must comply with the following fire/explosion safety requirements:

(a) Sources of Ignition. All fires, open flames or other sources of ignition, including smoking materials, shall be eliminated from the area or unit under the control of the finisher/refinisher prior to the application of any flammable finish or refinish material and until the product has sufficiently dried as determined by the manufacturer's specifications.

If any flammable liquids are used, all electric lights to be used during the work must be turned on before the liquids are brought onto the property and not turned off until the applied flammable liquids are dry to the touch and any remaining unused liquids have been removed from the property.

If any flammable liquids are used, no spotlights, halogen lights, drop lighting, or other lamps that create more heat than standard incandescent lighting may be used during floor finishing until the applied finish is dry to the touch.

(b) Electricity. Electrical equipment shall be designed and installed in accordance with 527 CMR 12.00: *Massachusetts Electric Code*. All power tools on the jobsite shall be properly grounded.

Electrical Permit Required. An electrical permit is required when connecting any floor refinishing machine directly to the electrical panel in accordance with 527 CMR 12.00.

(c) Appliances. If any flammable products are used, all appliances in the home or building unit that are under the control of the owner or tenant which have a standing pilot light or which can produce sparks must be turned off or disconnected before the flammable products are brought onto the property and for at least 24 hours after application. These appliances include, but are not limited to, the following:

1. All water heaters in the unit, including those in the basement
2. All pilot lights in the unit, including those in the stove and basement
3. All heaters, furnaces, and air conditioners in the unit
4. All refrigerators in the unit
5. All other appliances in the unit that might produce sparks

10.15: continued

(d) Warning Signs. Any person or other entity using flammable liquids for finishing or refinishing floors in a building containing more than one dwelling unit shall post suitable warning signs indicating the danger of fire/explosion and shall be conspicuously posted on all doors and entrances to the building and/or unit. Such notice is to be printed in contrasting colors and shall have lettering at least two inches high and should state the name of the operator in charge, the date and time of the operation and the area or unit where work is to be performed. Warning signs shall be posted at least 24 hours prior to engaging in such work.

No Smoking signs featuring the international pictograph prohibiting smoking, must be posted at all entrances to the house or building before floor sanding or finishing begins and until 24 hours after the end of all floor sanding and finishing activities.

(e) Ventilation. Adequate ventilation must be provided in accordance with the floor finish material manufacturer's instructions. If ventilation directly to the outdoors is not available or the refinisher is not able to comply with the floor finish manufacturer's instructions, the application of any flammable liquid is strictly prohibited

(3) Special Conditions.

(a) Storage of Flammable Liquids. Storage of flammable or combustible liquids in such rooms shall be in compliance with 527 CMR 14.00.

(b) Waste Materials. A metal waste can with a self closing cover shall be provided for all waste materials, including wood dust, and rags. All such materials shall be removed from the building and disposed of daily in accordance with local, state and federal regulations.

10.16: Dust Explosion Hazards

(1) General.

(a) Scope. Equipment, processes and operations which involve dust consisting of pulverized particles of any material which, if mixed with air in the proper proportions, becomes explosive and may be ignited by flame or spark shall comply with the applicable requirements of 527 CMR and the provisions of 527 CMR 10.16, and shall be maintained in accordance with NFPA 61, 65, 68, 69, 85F, 91, 490, 651, 653, 654, and 655 where provisions of 527 CMR 10.16 do not specifically cover conditions and operations.

(b) Permit Required. A permit shall be obtained from the head of the fire department for the operation of any grain bleacher or elevator; flour, starch or feed mill; malt house; wood flour manufacturing plant; or plant pulverizing aluminum, coal, cocoa, magnesium, spices, sugar or other material producing dust as defined in 527 CMR 10.16(1)(a).

(2) Fire Safety Requirements Precautions. Smoking and the carrying of matches, the use of heating or other devices employing an open flame, or use of any spark producing equipment shall be prohibited in areas containing dust producing or dust agitating operations. Artificial lighting in such areas shall be by electricity with all wiring and electrical equipment installed in accordance with 527 CMR 12.00: *Massachusetts Electrical Code*.

10.17: Places of Assembly

(1) General.

(a) Scope. The decoration, operation or use of places of assembly and education shall comply with the applicable requirements of 527 CMR 10.00 and 21.00 and 780 CMR.

(b) Permit Required. A place of assembly or one for educational use shall not be maintained, operated or used as such without a Certificate of Inspection from the building code official.

(c) Posting of Occupant Load. Each place of assembly or education shall be posted with an approved legible sign in contrasting colors conspicuously located near the main exit from the room or space stating the number of occupants permitted within such space. The number of occupants permitted shall be determined by 780 CMR: *The Massachusetts State Building Code*. Assembly rooms or spaces which have multiple use capability shall be posted for all such uses. The owner shall be responsible for installing and maintaining such signs.

10.17: continued

- (d) Overcrowding. No person shall permit overcrowding or admittance of any person beyond the established posted occupant load of any place of assembly or education. The head of the fire department, upon finding overcrowded conditions or obstruction in aisles, passageways or other means of egress, or finding any condition which constitutes a hazard to life and safety shall cause the performance, presentation, spectacle or entertainment to be stopped until the area posted occupant load is re-established or the obstruction or hazardous condition is removed.
- (2) Decorative Material. Decorative materials shall conform to 527 CMR 21.00 and 780 CMR.
- (3) Motion Picture Screens. In places of assembly or education, a motion picture screen or screen masking shall not be used which will ignite and allow flame to spread over the surface when exposed to the test method test described in 527 CMR 21.00.
- (4) Means of Egress.
- (a) General. The operator or the person in charge of operation or use of any place of assembly or education shall check egress facilities before such building is occupied for any use, to determine compliance with the provisions of 527 CMR 10.17. If such inspection reveals that any element of the required means of egress is obstructed, inaccessible, locked, fastened or otherwise unsuited for immediate use, admittance to the building shall not be permitted until necessary corrective action has been completed.
 - (b) Doors. An egress door shall not be locked, bolted or otherwise fastened or obstructed by any means, so that the door cannot be opened from the inside by the use of the ordinary door latch or knob or by pressure on the door or on a panic release device except as provided in 780 CMR.
 - (c) Aisles. In each room where chairs, or tables and chairs, are used the arrangement shall be such as to provide for ready access by aisles to each egress door. Aisles leading directly to an egress door shall have not less than 44" clear width. When serving an occupant load of 50 or less, such required clear width shall not be less than 36". Aisles shall not be obstructed by chairs, tables or other objects.
 - (d) Obstructions. A part of a stairway, whether interior or exterior, or of a hallway, corridor, vestibule, balcony or bridge leading to a stairway or exit shall not be used in any way that will obstruct or restrict its use as a means of egress or that will present a hazardous condition.
 - (e) Signs and lighting. The signs and lighting of means of egress required for places of assembly or education shall be maintained in proper operating condition and be installed in accordance with 780 CMR.
- (5) Projection Rooms.
- (a) Refer to 780 CMR.
 - (b) Miscellaneous equipment: A maximum of four flammable liquid containers that do not have a capacity greater than 16 ounces and are of a nonbreakable type shall be permitted in each projection room.

10.18: Matches

- (1) General.
- (a) Scope. The storage or handling of matches in quantities as indicated herein shall comply with the applicable requirements of 527 CMR 10.00 and the provisions of 527 CMR 10.18.
 - (b) Permit required. A permit shall be obtained from the head of the fire department for the manufacture or storage of matches exceeding 25 cases in aggregate.
- (2) Fire Safety Requirements.
- (a) Wholesale storage. At wholesale establishments and wherever more than 25 cases of matches are stored, shipping containers containing matches shall be arranged in piles not exceeding 18' in height nor 25,000 cubic feet in volume. Such pile units shall be separated from each other and from other combustible material by a clear space of not less than four feet. Matches shall not be stored within ten feet of any exit, open stairway, elevator shaft opening or other vertical opening.

**THE COMMONWEALTH OF MASSACHUSETTS**William Francis Galvin
Secretary of the Commonwealth**Regulation Filing** *To be completed by filing agency*CHAPTER NUMBER: 527 CMR 22.00CHAPTER TITLE: Cannon or Mortar FiringAGENCY: Board of Fire Prevention RegulationsSUMMARY OF REGULATION: *State the general requirements and purposes of this regulation.*

This regulation governs the firing of muzzle-loading cannons during patriotic celebrations and re-enactments, and covers all such artillery ranging from pre-Revolutionary War vintage to present-day facsimiles.

This particular amendment updates current safety standards and references and improves readability.

REGULATORY AUTHORITY: M.G.L. c. 22D, s. 4 and c. 148, s. 9,10 and 28AGENCY CONTACT: Peter A. Senopoulos PHONE: 978-567-3183ADDRESS: Board of Fire Prevention Regulations**Compliance with M.G.L. c. 30A**EMERGENCY ADOPTION - *if this regulation is adopted as an emergency, state the nature of the emergency.*PRIOR NOTIFICATION AND/OR APPROVAL - *If prior notification to and/or approval of the Governor, Legislature or others was required, list each notification, and/or approval and date, including notice to the Local Government Advisory Commission.*

Executive Order 485 approval: 8-24-09

Executive Order 145 notice (Local Govt. Advisory Commission): 8-25-09

PUBLIC REVIEW - *M.G.L. c. 30A sections 2 and/or 3 requires notice of the hearing or comment period be filed with the Secretary of the Commonwealth, published in appropriate newspapers, and sent to persons to whom specific notice must be given at least 21 days prior to such hearing or comment period.*Date of public hearing or comment period: October 1, 2009

FISCAL EFFECT - *Estimate the fiscal effect of the public and private sectors.*

For the first and second year: no additional effect

For the first five years: none

No fiscal effect: _____

SMALL BUSINESS IMPACT - *State the impact of this regulation on small business. Include a description of reporting, record keeping and other compliance requirements as well as the appropriateness of performance versus design standards and whether this regulation duplicates or conflicts with any other regulation. If the purpose of this regulation is to set rates for the state, this section does not apply.*

No impact

CODE OF MASSACHUSETTS REGULATIONS INDEX -
Canon and mortar firings

List key subjects that are relevant to this regulation:

PROMULGATION - *State the action taken by this regulation and its effect on existing provisions of the Code of Massachusetts Regulations (CMR) or repeal, replace or amend. List by CMR number.*

Amends existing regulation

ATTESTATION - *The regulation described herein and attached hereto is a true copy of the regulation adopted by this agency.* ATTEST:

SIGNATURE: _____

DATE: 10-7-09

Publication - *To be completed by the Regulations Division*

MASSACHUSETTS REGISTER NUMBER: 1142

DATE: 10/30/09

EFFECTIVE DATE: 10/30/09

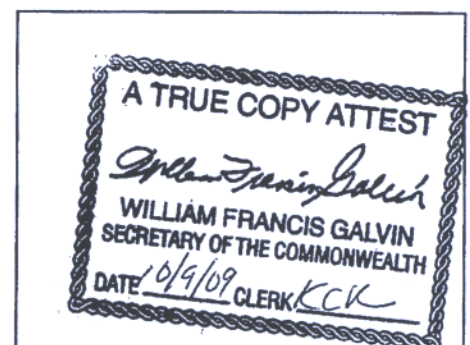
CODE OF MASSACHUSETTS REGULATIONS

Remove these pages:

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217 - 222

217 - 222



527 CMR 22.00: CANNON OR MORTAR FIRING

Section

- 22.01: Purpose and Scope
- 22.02: Definitions
- 22.03: Permits
- 22.04: Certificates of Competency
- 22.05: Range Conditions and Other Pre-firing Requirements
- 22.06: Magazines and Powder
- 22.07: Firing of Cannons
- 22.08: General Provisions

22.01: Purpose and Scope

- (1) 527 CMR 22.00 governs the firing of muzzle-loading cannons during patriotic celebrations and re-enactments, including all such cannons ranging from pre-Revolutionary War vintage to present-day facsimiles.
- (2) 527 CMR 22.00 shall not apply to any cannon exhibit in which explosives are not being used.
- (3) Ammunition for any cannon shall be subject to all the applicable requirements contained in 527 CMR 13.00.

22.02: Definitions

The following terms shall have the meanings assigned to them unless the context clearly indicates otherwise:

Blank-fire. The supervised discharge of a cannon or mortar without projectile.

Cannon. Any gun designed to be fired from a carriage resting on the ground and which is loaded from the muzzle with rigid non-combustible black powder cartridge.

Competent Operator. A person at least 21 years of age who holds a current Certificate of Competency for cannon firing issued by the State Fire Marshal.

Display. The supervised discharge of cannon or mortar, whether blank-fire without projectile or live-fire with projectile.

Head of the Fire Department. As defined in M.G.L. c. 148, § 1.

Live-fire. The supervised discharge of cannon or mortar with projectile.

Marshal. The State Fire Marshal, as defined in M.G.L. c. 148, § 1.

Mortar. Any cannon whose length is less than six times its bore diameter, or any cannon fired at an elevation of 45° or more from the horizontal.

Range. An area designated for the discharge of various weapons, having a minimum unobstructed length of 100 yards, a minimum unobstructed width of 25 yards, equipped with a natural or manmade down range barrier a minimum of ten feet in height.

22.03: Permits

- (1) A permit for the supervised firing of a cannon shall be issued by the head of the fire department on permit forms furnished the fire departments by the Marshal.

22.03: continued

- (2) An application for permit for supervised firing shall be submitted to the head of the fire department in the municipality where the supervised firing is to take place not less than 15 days in advance of firing date, and shall state whether blank-fire or live-fire. Submission of this application is an assurance that the cannons to be fired will be inspected by the competent operator and meets all safety requirements prior to firing.
- (3) Upon receipt of application, the head of the fire department shall make an investigation of the pertinent facts set forth in application for the purpose of determining compliance with all provisions of law and of 527 CMR 22.00. Upon completion of the investigation, the head of the fire department shall transmit one copy of application to the Marshal and one copy to the applicant with his endorsement thereon in compliance with provisions of law, or his reason for withholding such endorsement.
- (4) No permit shall be issued for the supervised discharging of cannon with or without projectile unless the applicant exhibits a Certificate of Competency for Cannon Firing.
- (5) No permit granted for a specific display shall be transferable.

22.04: Certificates of Competency

- (1) The firing of any cannon, with or without projectile, shall be under the direct control of competent operator who holds a current Certificate of Competency issued by the Marshal.
- (2) Any person desiring to obtain a Certificate of Competency shall make written application to the Marshal and shall submit to such examination and test as the Marshal may prescribe. Such certificate if issued shall continue in effect for a period of five years, and may be renewed upon prior written request of the holder, provided it has not been suspended or revoked by the Marshal.
- (3) Any violation of 527 CMR 22.00 or the conditions of a permit may be cause for immediate revocation of Certificate of Competency.

22.05: Range Conditions and Other Pre-firing Requirements

- (1) No cannon shall be fired with ball, shot or projectile unless a permit for live firing has been obtained from the head of the fire department and only on ranges approved by the head of the fire department. Such ranges shall be clear and unobstructed between discharge point and target area and for a safe distance to the rear of target in event of an overshoot. The target area shall not exceed 250 yards from the point of discharge.
- (2) There shall be no permanent building, public highway, railroad, or other public way within the forward sector of a 180° arc having a radius of 100 feet from the muzzle of the cannon. A similar sector of 180° directed toward the rear 75 feet in radius shall be clear of all public ways, permanent buildings, or other obstructions.
- (3) It shall be the responsibility of the competent operator to determine that the area in which the display is to be conducted is safe and that all operations are conducted in compliance with the requirements of 527 CMR 22.00. The competent operator, head of the fire department, the Marshal, or his authorized representative may order postponement of the display for any violation of 527 CMR 22.00, or for any other reason related to public safety.
- (4) No discharging of any cannon shall be permitted during any windstorm in which the direction and velocity of the wind renders the display dangerous to the public safety and/or surrounding property.
- (5) There shall be no discharging of cannon between the hours of sunset and sunrise without prior written approval from the head of the fire department.

22.05: continued

- (6) The head of the fire department shall designate the location and type of fire extinguishing equipment as may be required.
- (7) No firing of any cannon may be conducted unless the crew is present in adequate numbers for the particular cannon or mortar. The competent operator shall be responsible to insure that all members of the crew have been fully trained in the safe operation of the cannon or mortar.
- (8) No member of the gun crew shall be under 18 years of age.
- (9) Smoking shall be prohibited in the discharge area.
- (10) No member of the audience shall be allowed in the forward or flank zone of the muzzle of a cannon firing a projectile within a forward sector of 180° having a radius of 150% of the estimated range of the piece.
- (11) The audience at a supervised firing of cannon shall be restrained behind lines 60 feet on the flank area back of the muzzle and 60 feet to the rear of the gun.
- (12) Unless otherwise allowed by the Marshal, no piece shall be discharged with blank ammunition unless all spectators are at a safe distance from the front of the piece and at least 60 feet to the rear or flank. Adjacent pieces shall be at a safe interval.

22.06: Magazines and Powder

- (1) All ammunition for cannon shall be transported and temporarily stored at the firing location in the finished state in a portable magazine. Such magazine shall be constructed of at least 24-gauge sheet metal lined with a minimum of ¾ inch marine plywood or other non-sparking material, and shall be of sturdy sealed construction held together with non-sparking fastenings. A suitable lock and hasp of non-sparking material shall be provided.
- (2) In the discharge area, a ready-service box constructed of wood with non-sparking fastenings and cover designed to be self-closing shall be positioned at ground level approximately 25 feet to the rear of the piece being served with the hinges toward the piece.
- (3) All magazines and ready-service boxes shall be closed prior to the loading of each cartridge of the piece being served and adjacent pieces. Ready-service boxes for each gun should contain the minimum number of cartridges required for the gun during that particular display. Magazines and ready-service boxes shall at all times be under the control of a competent member of the gun crew.
- (4) No loose or bulk powder other than priming powder in quantities not exceeding ½ ounce shall be used in the firing of any cannon, and no loose or bulk powder shall be transported or stored in any portable magazine with cartridges.
- (5) Cartridge. Blank artillery cartridges shall be made up of Black Powder only, not to exceed 4 oz. per inch of largest bore diameter. Cartridges must have a minimum of three wraps of heavy-duty aluminum foil and be packed to a firm consistency.
Only cannon grade, 1F, or 2Fg black powder will be used. Powder grades cannot be mixed. No artillery cartridges shall be constructed at the event site. No wadding of any kind is permitted in blank firing
- (6) The amount of black powder used in each cartridge shall be such as to not present an undue hazard to persons, property, or the piece itself.
 - (a) Powder cartridges for cannons shall not exceed four ounces of powder per inch of bore diameter.
 - (b) Powder cartridges for mortars shall not exceed four ounces of powder per inch of chamber diameter.

22.07: Firing of Cannons

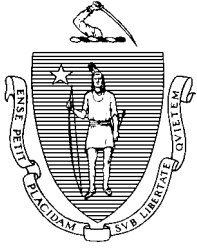
- (1) No torch shall be used to ignite any cartridge to be fired from a cannon.
- (2) All cannons used to fire a projectile shall be provided with an instant source of ignition such as an electrical squib or bridge wire or percussion cap or other approved instant firing device. Exception to the foregoing shall apply to the use of fuses for the firing of mortars.
- (3) No firing of any steel or iron cannon or mortar shall be conducted unless the weapon contains a seamless steel safety sleeve with breech plug, designed for such firing and have had a boroscope inspection conducted by a qualified person. Original guns and bronze guns may be used without a safety sleeve, provided that they have had a boroscope inspection conducted by a qualified person. Pits, scratches, or other defects more than 3/16 inch deep shall render the cannon unusable.
 - (a) Cannons and mortars used for live firing shall have a boroscope inspection conducted at least once every five years.
 - (b) Cannons and mortars used exclusively for blank firing shall have a boroscope inspection conducted at least once every ten years.
- (4) Projectiles shall not be so constructed as to develop any unsafe pressures; and no combustible, explosive, or pyrotechnic projectiles may be used.
- (5) Reloading shall not commence until the worming and wet sponging has been completed after firing.
- (6) The piece shall be wormed and wet sponged between shots and the vent stopped from the time the worm enters the muzzle until the rammer is removed from the bore after the cartridge is rammed in blank-firing, or the projectile is rammed in live-firing.
- (7) At no time shall any cannon be left unattended while loaded or during a misfire until the piece has been cleared.
- (8) In the event of a misfire, the competent operator shall take the following steps:
 - (a) The gunner shall give an audible warning.
 - (b) No personnel shall approach the front of the muzzle.
 - (c) A mandatory three minute cooling off period shall be observed.
 - (d) The piece shall be re-primed from a safe position and a repeated attempt made to fire the piece.
 - (e) If the attempt to re-fire the piece is unsuccessful, the piece shall be flooded with water through the vent and allowed to soak for a period of at least one hour unless the water or compressed gas can be used to flush the cartridge out of the muzzle.
 - (f) The projectile and/or cartridge shall be removed through the muzzle.
- (9) If, after a display, the competent operator has reason to believe that there are any unignited charges or remnants thereof containing explosives in the area, he shall make a thorough search of the area for such explosives. The responsibility for disposition of it shall be assumed by the competent operator.

22.08: General Provisions

Any explosion, fire, or other accident occurring in connection with the keeping, storage, manufacture, handling, transportation, supervised display or other disposition of ammunition for cannon causing loss of life or injury to any person or damage to property shall be immediately reported to the Marshal by the competent operator, giving a detailed account of same and confirmed in writing.

REGULATORY AUTHORITY

527 CMR 22.00: M.G.L. c. 22, § 14; c. 148, §§ 9 and 10.



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GOVERNOR

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LT. GOVERNOR

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STEPHEN D. COAN
STATE FIRE MARSHAL

THOMAS P. LEONARD
DEPUTY STATE FIRE MARSHAL

ADVISORY

TO: Heads of Fire Departments

FROM: Stephen D. Coan
State Fire Marshal

DATE: December 1, 2009

SUBJECT: Toyota Limited Service Campaign

This office has been provided information by a local fire protection consulting firm about a Limited Service Campaign that will be implemented in the local Toyota dealerships. The Campaign has begun and is expected continue until the fall of 2010. This Campaign involves the application of anti-corrosion sealant materials to the frame rails, on the underside of specific Toyota vehicles.

The vehicles will be raised up on a lift in the dealership's regular service bay. If the vehicle work area will be within 20' of an adjacent bay, temporary partitions, with a 12" ventilation opening at the bottom, would be located around the vehicle. There will be no open flames or spark-producing equipment or appliances within 20' of this operation. Additional fire extinguishers will be provided in the vicinity of this operation.

On the lift, the frame rails would be prepped for application. This set-up and prep time (approximately 1¼ hours) allows for a sufficient cooling of the vehicle.

Once the vehicle is prepped and cooled, two liters of the first combustible liquid (Nox-Rust 712AM - Class IIIB liquid) are applied to the interior of the vehicle's frame. Then, three liters of the second combustible liquid (NOX-Rust X128T - Class II liquid) are applied to the exterior of the vehicle frame. Both of the combustible liquids are sprayed onto the rails via a specialized spray gun with limited overspray.

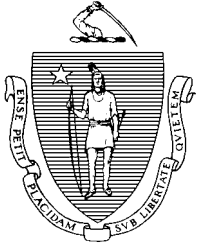
In accordance with 527 CMR 14.03, a revised permit is required from the Head of the Local Fire Department for the storage, use and/or handling of the additional combustible liquids used in the Campaign. The Head of the Local Fire Department may prescribe how the combustible liquids are stored (per 527 CMR 14.03(4)) and/or may limit the quantity being stored (per 527 CMR 14.03(5)).

The storage of containers exceeding 120 gallons for the Class II combustible liquid and/or 13,200 gallons of the Class IIIB combustible liquids would require conformance with 780 CMR.

As long as the Campaign's guidelines are followed and the appropriate permits are obtained, it is the opinion of this office that the provisions of 527 CMR and the 1995 NFPA 33 have been complied with.

If there are any questions, please feel free to contact the Code Compliance and Enforcement Unit at 978-567-3375, or at our Western Mass. Office at 413-587-3181.

SDC/bhs



DEVAL L. PATRICK
GOVERNOR

TIMOTHY P. MURRAY
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The Commonwealth of Massachusetts
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STEPHEN D. COAN
STATE FIRE MARSHAL

THOMAS P. LEONARD
DEPUTY STATE FIRE MARSHAL

MEMORANDUM

To: Heads of Fire Departments

From: Stephen D. Coan
State Fire Marshal

Date: December 16, 2009

RE: Use and Storage of alcohol based hand rub preparations

Background Information

With much concern over the spread of influenza many businesses and companies have already installed alcohol based hand sanitizers, which are recognized and recommended as a component of hand hygiene to prevent the spread of infectious diseases such as influenza. There is little fire history associated with the installation of these products, which were first seen in the health care industry over five years ago.

The Centers for Disease Control and Prevention (CDC) defines, alcohol-based hand cleaners as, an alcohol-containing preparation designed for application to the hands for reducing the spread of bacteria. These alcohol-based hand cleaners can be found in liquid, foam and gel forms. The cleaners usually contain 60% to 95% ethanol or isopropanol alcohol. The volume of the cleaners' dispensers range from small portable pocket sized containers to liter sized wall mounted hand pumped containers.

Attached for your information is a guidance document for schools from the Department of Public Health, in which they recommend placement of the alcohol based hand rub preparations in each classroom.

Emergency Regulations

As these products are flammable liquids by definition, the intent of the emergency amendment is to provide a balance between the obvious harm created by the spread of influenza in conjunction and the basic public safety concerns created by storage and use of these products.

Due to the current State Fire Code configuration and the calls we have received from fire officials, the Board of Fire Prevention Regulations (527 CMR) regulations have created a special regulation to govern the use and storage of alcohol based hand rub preparations. The emergency amendments to 527 CMR 10.03(16): Use and Storage of alcohol based hand rub preparations provide for the following:

- Exempts the personal use and handling from permitting
- Sets a permit requirement only for storage in excess of 10 gallons
- Sets a separation distance between adjacent containers

If you have any questions, please contact the Code Compliance and Enforcement Unit at (978) 567-3375 or in Western MA at 413-587-3181.

Amendment to 527 CMR 10.03 (16) and (17)
As approved by the Board for emergency filing on 12-10-09

Amend 527 CMR 10.03 by renumbering the existing subsection 10.03 (16) as number (17) and insert the following new subsection (16):

16) Use and Storage of alcohol based hand rub preparations

- (1) The personal use and handling of an alcohol based hand rub preparation is exempt from the permitting requirements of 527 CMR 14.00.
- (2) The storage of alcohol based hand rub preparations, in excess of 10 gallons, shall comply with the requirements of 527 CMR 14.00
- (3) The use of wall-mounted or free-standing units used to dispense an alcohol based hand rub preparation shall comply with the following requirements:
 - a. The maximum capacity of each dispenser shall be 41 ounces.
 - b. The minimum separation distance between dispensers shall be 48 inches.
- (4) No alcohol based hand rub preparation dispenser shall be located directly over or adjacent to any ignition source such as, but not necessarily limited to, electrical outlets, light fixtures or electrical appliances or any open flame device.
- (5) For the purposes of this subsection, an Alcohol-based hand rub preparation is defined as a preparation containing alcohol designed for application to the hands for reducing the number of viable microorganisms on the hands and contains from 60% to 95% ethanol or isopropanol alcohol.



The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health

Fall 2009 Influenza Guidance for Schools

Updated November 6, 2009

As the 2009-2010 school year begins, the Massachusetts Department of Public Health (DPH) is providing updated guidance for schools concerning H1N1 influenza, seasonal influenza, and influenza-like illness (ILI). MDPH expects that both seasonal and H1N1 influenza will be circulating in the fall and is preparing for increased number of cases. The main changes in the guidance since the spring of 2009 are: 1) the importance of **early seasonal flu vaccination**; 2) the **availability of H1N1 influenza vaccine**; and 3) the **shorter isolation period for those with influenza-like illness (ILI)**. The information provided is based on the most recent guidance from the Centers for Disease Control and Prevention (CDC). ***Our goal for the new school season is limiting transmission in schools in order to keep schools open and functioning as usual.***

Guidance is provided to schools in six areas:

1. Seasonal Influenza Vaccination
2. H1N1 Influenza Vaccination
3. Control and Surveillance Measures for ALL Schools
4. Prevention and Education
5. Planning for the Flu Season
6. Decisions about School Dismissal or Closing

1. Seasonal Influenza Vaccination

As was the case last year, annual seasonal influenza vaccination is recommended for all children aged 6 months through 18 years. Schools should work closely with local boards of health, community vaccinators, parents, students and healthcare providers to ensure that students are vaccinated. Seasonal influenza vaccine became available in Massachusetts communities in August of 2009. It is recommended that communities begin seasonal influenza vaccination as soon as possible after vaccine becomes available. For more information concerning seasonal influenza vaccination please go to mass.gov/flu and click on "Seasonal Flu."

2. H1N1 Influenza Vaccination

H1N1 vaccine is expected to be available starting in October. Schools will need to work closely with local boards of health, community vaccinators, parents, students and healthcare providers to ensure that students are vaccinated. While vaccination is recommended for everyone, initial target groups are:

- pregnant women
- household contacts and caregivers of infants less than 6 months of age
- people age 6 months – 24 years old
- people age 25 – 64 years old with certain health problems that can put them at increased risk for complications (such as heart disease, asthma, diabetes, weakened

- immune systems, certain muscle and nerve disorders that can lead to breathing or swallowing problems)
- healthcare providers and emergency medical services staff

Most children (under age 10) will need two doses of H1N1 vaccine, spaced approximately 4 weeks apart. Children over 10 and adults will need one dose. Please note that the target groups listed above may be further prioritized based on vaccine availability.

The CDC and state health departments will be monitoring very closely for any signs that the H1N1 vaccine is causing unexpected adverse events, and the Vaccine Adverse Event Report System (VAERS) system is in place to report suspect events and investigate rapidly. More detailed information regarding target groups, allocation and administration of H1N1 vaccine will be distributed widely when the vaccine is available.

A federal law known as the PREP Act provides protection from liability for anyone involved in any part of a vaccination campaign against H1N1 flu.

3. Control and Surveillance Measures for ALL Schools

The following recommendations are designed to help prevent the spread of ILI in schools and should be followed all the time, not only during a flu outbreak. *If the CDC or DPH determine that flu conditions are more severe than the spring 2009 outbreak, additional guidance will be issued.*

- Promptly isolate and send home all students or staff who become sick at school with influenza-like illness.**
- Students and staff with flu-like illness should be sent to a separate room, if possible, until they can be sent home. The ill individuals should wear surgical masks, if possible, and those caring for them should wear masks too.**
- All sick students and staff should stay home for at least 24 hours after they no longer have a fever. This fever-free period *must* be without the use of fever-reducing medicines,** like Motrin (ibuprofen) or Tylenol (acetaminophen). They should stay home until at least 24 hours after they no longer have a fever even if they are taking antiviral medicines. Many people can expect to stay home for about 4 days: about 3 days with fever and one more day with no fever and no fever reducing medicines. However, the fever with influenza can last 2-5 days or more, so students and staff should be prepared to stay home as long as it takes to become fever-free for 24 hours.
- Make sure that sick students, teachers and staff stay home.** Inform parents that they should assess children for symptoms of influenza before sending them to school. ILI symptoms include fever plus cough and/or sore throat. It may also include other symptoms, such as vomiting or diarrhea. Distribute the *Flu Symptom Checklist* to families and ask that parents use it if they are unsure if their child is well enough to go to school. Distribute it to staff as well. Keeping people with a fever at home will reduce the number of people who get infected.
- Encourage early medical evaluation of high-risk students and staff** who have conditions that put them at increased risk of complications from the flu (heart disease, asthma, diabetes, pregnancy, weakened immune systems, and certain muscle and nerve

disorders that can lead to breathing or swallowing problems). Try to identify these individuals now, so they can be promptly referred if they become ill.

- **Monitor absenteeism in students and staff.** School nurses and student health centers should report higher than normal absenteeism or clusters due to influenza-like-illness to your local health department and to the DPH Immunization Program at 617-983-6800. An epidemiologist is available to provide further guidance on surveillance and outbreak control.
- **Otherwise healthy students and staff experiencing mild ILI do not need to seek medical care** since this would place a difficult burden on the health care system. Therefore, if a child is out with ILI and has stayed home according to the guidelines above, they do **not** need a note from their doctor or to have had a flu test in order to return to school.
- **A negative rapid influenza test result can occur even when someone does have influenza (a “false negative”).** Rapid influenza tests, used in some medical offices and emergency rooms, can help in the diagnosis and management of patients with signs and symptoms of influenza. If they are positive, the likelihood that the patient has influenza is very high. However, if they are negative, the patient can still have influenza. Therefore, a negative rapid test can not be used to shorten the exclusion period.
- **A health care provider’s note recommending a child with ILI return to school does not supersede the public health exclusion guidance.**

4. Prevention and Education

Schools can act as a point of spread of flu cases, and students can easily spread flu to other students and their families. The primary steps for prevention and decreasing transmission of flu cases are listed below:

- **Make sure all school aged children are vaccinated against both types of flu.**
 - Children and staff should get a **seasonal flu shot** as soon as possible, starting in early September
 - Children will be able to get an **H1N1 flu shot** starting in October. The H1N1 flu shot is recommended for everyone, especially:
 - pregnant women
 - household contacts and caregivers of infants less than 6 months of age
 - young people age 6 months to 24 years old
 - persons age 25 – 64 years old with certain health problems that can put them at increased risk for complications (such as heart disease, asthma, diabetes, weakened immune systems, certain muscle and nerve disorders that can lead to breathing or swallowing problems)
 - healthcare providers and emergency medical services staff
- **Emphasize and remind students and staff about the importance of proper hand washing and cough etiquette in preventing the spread of diseases.** Provide the time and supplies for students and staff to wash their hands when needed. Place hand sanitizer in each classroom to facilitate regular hand hygiene. Place boxes of tissues in each room.

- **Ask teachers or school nurses to demonstrate and teach proper hand washing and cough etiquette in each class**, and to explain why it's important. Educational materials, posters, etc., are available on the DPH website, www.mass.gov/flu. Send hand washing or other flu control educational materials home to parents and ask for their assistance in reinforcing these messages with their children.
- **Clean surfaces and items that are more likely to have frequent hand contact (“high touch surfaces”) with your normal cleaning agents according to your routine schedule.** Once respiratory secretions containing the virus dry out, the virus is no longer effectively infectious. Reassure parents and staff that there is no need for special disinfection or decontamination efforts and that the main focus should be on hand washing and cough and respiratory etiquette.

5. Planning for the Flu Season

- Try to set up a separate room for care of sick students or staff until they can go home.
- Purchase personal protective equipment such as surgical masks for nurses and other staff providing care for sick people at home and train staff about basic infection control.
- Update student and staff contact information as well as emergency contact lists.
- Identify and establish a point of contact with your local board of health.
- Develop a plan to cover key positions, such as the school nurse, when staff stay home when they are sick.
- Review school policies, such as attendance awards criteria, to avoid any incentives for students or staff to go to school when sick and to encourage social distancing.

6. Decisions about School Dismissal or Closing

In order to limit the spread of influenza, DPH has recommended a policy focused on keeping all students and staff with symptoms of influenza out of school and related school activities during their period of illness and recuperation, when they are infectious to others. *The goal is to keep schools open and functioning as usual.*

However, DPH recognizes that, on a case-by-case basis, some schools may need to consider the dismissal or closure of a facility if the extent of influenza-like illness has impaired the school's ability to perform its educational functions, or it is a facility where most of the students are pregnant or medically fragile*. ***School officials must discuss their situation with their local board of health and/or DPH prior to making this determination.*** Schools should prepare for the possibility of school dismissal or closure before facing this decision. This includes asking teachers, parents, and officials in charge of critical school-associated programs (such as meal services) to make contingency plans.

Please check the MDPH website for additional guidance concerning school closures at www.mass.gov/flu.

* A medically fragile child is one who needs intensive life sustaining medical assistance with daily living, for example, a child who uses an oxygen tank, needs suctioning, is on a ventilator, is fed through a tube or has trouble moving.

Factors to consider in school closure decisions:

1. Absenteeism that is substantially higher than expected for the facility at this time of year
2. Confirmation that the absenteeism is due to influenza-like-illness
3. Indication that the already high absenteeism is rising rather than falling
4. Inability to function due to high absenteeism among students and/or staff

If a decision to dismiss or close a facility is made in consultation with the local board of health and/or DPH, the following should be considered:

- Cancellation of all school-related gatherings and discouraging parents and students from congregating outside of the school.
- Duration of closing: The duration of closings for school and childcare facilities should be for 5-7 days. *School authorities should consult with their local board of health and DPH for guidance on reopening.*
- Steps to take after reopening: Keep in mind that flu will likely still be circulating, and there will be the potential for more cases when your facility re-opens. Be prepared to institute all of the necessary surveillance and control measures at that time.
- Reporting to DPH: If a decision is made to close a school, the school should notify DPH by calling the Immunization Program at 617-983-6800 and ask to speak to an epidemiologist. The school should also submit a *School Closure Reporting Form* to the DPH Office of Integrated Surveillance and Informatics Services by fax at 617-983-6220. The form is available at:
www.mass.gov/Eeohhs2/docs/dph/cdc/flu/swine_school_closure_form.pdf.

Additional Information and Resources

For the most up-to-date information concerning H1N1 and seasonal influenza, please check the MDPH flu web site at **www.mass.gov/flu**.

CDC has developed *Preparing for the Flu: A Communication Toolkit for Schools (Grades K – 12)* which contains helpful detailed information. Included are questions and answers, fact sheets, template letters and educational materials. This Toolkit should be considered an additional resource for you and is available at: **<http://www.flu.gov/plan/school/>**.